

# Epidemiological Alert Influenza

30 April 2018

Considering the start of the influenza season in the Southern Hemisphere, the Pan American Health Organization / World Health Organization (PAHO/WHO) recommends Member States adopt necessary measures for ensuring appropriate clinical management, strict compliance with infection prevention control measures in health care services, and adequate supplies of antivirals. PAHO/WHO also urges Member States to amplify seasonal influenza vaccination activities to prevent serious influenza cases as well as deaths from influenza.

# Situation summary

Following is a summary of the influenza situation by sub-regions (listed alphabetically) in the Region of the Americas. More detailed information on the situation of influenza and other respiratory viruses can be obtained from the PAHO/WHO Regional Influenza Update, published weekly, on the PAHO/WHO website at: <a href="https://www.paho.org/influenzareports">www.paho.org/influenzareports</a>.

In the **Andean sub-region<sup>2</sup>**, in early 2018, influenza circulated early and intensely in Ecuador, with a predominance of influenza A(H1N1)pdm09. The hospitalization counts in Ecuador increased this year as compared to prior years. In Peru, during the first three weeks of 2018, among the circulating influenza viruses, there was a mix of influenza A(H1N1)pdm09, influenza A(H3N2), and influenza B. Recently, in Bolivia increases in influenza were observed in the department of Santa Cruz, although the hospitalization counts remain comparable to 2017.

In the **Caribbean sub-region**<sup>3</sup>, in early 2018 the Dominican Republic, French Guiana, and Jamaica reported influenza cases with predominance of influenza A(H1N1)pdm09 and B. The hospitalization counts in Jamaica were comparable to prior years. Hospital-based surveillance data from the other countries/territories in this sub-region were not reported to PAHO/WHO.

In the **Central American sub-region**<sup>4</sup>, in Costa Rica and Guatemala influenza cases were reported in the first months of 2018. In Costa Rica the late-2017 circulation of influenza continued into the early part of 2018, trending downward since epidemiologic week (EW) 4 of 2018, with a predominance of influenza A(H3N2). In Guatemala, influenza percent positivity

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<sup>&</sup>lt;sup>1</sup> The information presented in this update is from the data reported by Ministries of Health and National Influenza Centers (NICs) of Member States via PAHO/WHO platforms (i.e., FluNet and FluID) and information from weekly reports and bulletins published online by Ministries of Health or shared directly with PAHO/WHO.

<sup>&</sup>lt;sup>2</sup> Bolivia (Plurinational State of), Colombia, Ecuador, Peru, and Venezuela (Bolivarian Republic of).

<sup>&</sup>lt;sup>3</sup> Aruba, the Bahamas, Barbados, Bermuda, the Cayman Islands, Cuba, Dominica, the Dominican Republic, French Guiana, Guyana, Haiti, Jamaica, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago.

<sup>&</sup>lt;sup>4</sup> Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.

has been increasing since EW 9 of 2018, with a mix of influenza A(H1N1pdm09) and A(H3N2) being detected. The severity of influenza disease, as measured by hospitalizations, was comparable to prior years in these two countries.

In the **North American sub-region**<sup>5</sup>, both in Canada and the United States of America the 2017-2018 influenza season began early and activity quickly increased. In these two countries the season was severe, as measured by hospitalizations and deaths, with a predominance of influenza A(H3N2) and early circulation of influenza B. In the United States, hospitalization rates exceeded rates observed during the severe 2014-15 season. In Mexico, while the season began early as well, it was not severe, as measured by hospitalizations, compared to prior seasons and activity decreased earlier than is typically observed.

In the **Southern Cone sub-region**<sup>6</sup>, during the first quarter of 2018, influenza activity was low with predominance of influenza B and A(H3N2); this remained through EW 14 of 2018.

#### **Recommendations**

PAHO/WHO reiterates its recommendations to Member States relating to surveillance, the clinical management of patients, the implementation of infection prevention control measures in health care services, and communication with the public about preventive measures in light of the intense influenza season observed in the northern hemisphere and the additional challenge some countries in the Southern Hemisphere may face with the arrival of the influenza vaccine, due to changes in its composition which caused delays in production and subsequent distribution.

Influenza vaccination prevents complications related to this disease and PAHO/WHO encourages Member States to continue vaccinating to avoid serious cases and deaths.

Following is a summary of the main recommendations concerning surveillance, clinical management, communication, and vaccination.

#### Surveillance

PAHO/WHO recommends the continued strengthening of acute respiratory infection (ARI) and influenza-like-illness (ILI) surveillance systems and prioritizing severe acute respiratory infection (SARI) surveillance to monitor the epidemiological behavior and viral circulation, trends, clinical severity and most affected risk groups.

To accompany indicator-based surveillance, PAHO/WHO recommends Member States implement event-based surveillance. Event-based surveillance is the organized and rapid capture of information about events that may pose a potential risk to public health. This information may come from rumors and other *ad-hoc* reports transmitted through formal channels (pre-established routine information systems) or informal channels (i.e., media, direct communication from health care workers, or non-governmental organizations). Event-based surveillance is a functional component of the early warning and response mechanism.<sup>7</sup>

<sup>&</sup>lt;sup>5</sup> Canada, Mexico, and the United States of America.

<sup>&</sup>lt;sup>6</sup> Argentina, Brazil, Chile, Paraguay, and Uruguay.

<sup>&</sup>lt;sup>7</sup> World Health Organization. Early detection, assessment and response to acute public health events: Implementation of Early Warning and Response with a focus on Event-Based Surveillance. Interim Version. WHO/HSE/GCR/LYO/2014.4. Geneva: WHO: 2014. Available at: http://www.who.int/ihr/publications/WHO HSE GCR LYO 2014.4/en/

Respiratory events that are unusual should be investigated immediately. Unusual events include: influenza cases with atypical clinical progression; ARI associated with animal disease or in travelers to areas at risk of novel influenza virus emergence; SARI among health care professionals; or clusters of influenza outside the typical circulation season.

As part of routine surveillance, and for the etiological confirmation of unusual cases, nasopharyngeal and oropharyngeal specimens (or bronchial lavage in severe cases) should be obtained for the detection of respiratory viruses, always prioritizing the laboratory analysis of the most serious cases, especially of deaths. The technical guidelines and diagnostic algorithms of the National Influenza Center or the reference laboratory at the national level responsible for laboratory surveillance should be followed.

Influenza-positive specimens from severe cases or from those with unusual presentations must be sent to the PAHO/ WHO Collaborating Center, the United States Centers for Disease Control and Prevention (CDC) in Atlanta for further characterization. Un-subtypeable samples of influenza A must also be sent immediately to the PAHO/WHO Collaborating Center.

### Clinical management

Groups at higher risk of complications related to influenza infection include children less than two years old, adults over 65, pregnant or post-partum women, people with underlying clinical morbidity (e.g., chronic lung disease, asthma, cardiovascular diseases, chronic kidney disease, chronic liver disease, diabetes mellitus, neurological conditions such as central nervous system injuries and delayed cognitive development), people with immunosuppression (e.g., HIV/AIDS or due to medications), and people with morbid obesity (Body Mass Index greater than 40). In these cases, the administration of antiviral treatment (oseltamivir) at the start of symptoms should be considered if influenza infection is suspected. Treatment should be initiated even before having laboratory confirmation of influenza infection, since the treatment is more successful if started early. Additionally, any person with severe clinical presentation should be treated with antivirals as soon as influenza is suspected.

#### Communication

Seasonal influenza is an acute viral infection that spreads easily from person to person. Seasonal influenza viruses circulate worldwide and can affect anyone from any age group. Influenza A (H1N1)pdm09, which caused the 2009 pandemic, now circulates annually and is now considered a seasonal influenza strain. Influenza vaccination prior to the start of the seasonal virus circulation remains the best preventive measure against severe influenza.

The public should be informed that the main mode of transmission of influenza is by interpersonal contact. Hand washing is the most efficient way to decrease transmission. Knowledge about "respiratory etiquette" also helps prevent transmission.

People with fever should avoid going to work places or public places until the fever subsides. Similarly, school-age children with respiratory symptoms and / or fever should stay home and not go to school.

#### Vaccination

PAHO/WHO recommends pregnant women have the highest priority in receiving influenza vaccines due to their vulnerability to complications from the disease. Other risk groups, in addition to pregnant women, that should be given priority for vaccination are the elderly, children 6 to 59 months of age, people with chronic medical conditions, and health care workers. Vaccination against influenza is not considered to be a strategy for control of outbreaks, but rather a preventive measure to avoid complications related to influenza.

## **Related Links**

- Influenza update. World Health Organization. Available at:
  <a href="http://www.who.int/influenza/surveillance\_monitoring/updates/latest\_update\_GIP\_surveillance/en/index.html">http://www.who.int/influenza/surveillance\_monitoring/updates/latest\_update\_GIP\_surveillance/en/index.html</a>
- Influenza Reports. Pan American Health Organization / World Health Organization. Available at: http://www.paho.org/influenzareports